

motor mix

TM



Owner's Manual

Version 3.0



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QuickStart, Setting up a Pro Tools / MotorMix System

- 1.) You will need a Pro Tools system with software version 4.1or later.
- 2.) Connect MotorMix MIDI IN and OUT to the MIDI OUT and IN on one port of your functioning MIDI interface.
- 3.) Launch OMS setup and define MotorMix: Is controller on MIDI channel 1 (only 2 boxes checked). Note: If you are using multiple MotorMix units with Pro Tools, each unit must be connected to the MIDI interface with two MIDI cables. Repeat step 3 for each unit, but create a unique name for each unit, like: MotorMix 1, MotorMix 2 etc.
- 4.) Open a Pro Tools session and select “controllers” in the peripherals menu.
- 5.) Select “MotorMix” and then select MotorMix and the number of channels = 8. Note: If you are using multiple MotorMix units with Pro Tools, repeat step 3 for each unit, but create a unique name for each unit, like: MotorMix 1, MotorMix 2 etc.
- 6.) If you are using Pro Tools 5.xx, pull down the MIDI menu and select “MIDI Input Devices”. Click on each MotorMix listed. This will enable Pro Tools to receive its MIDI input.
- 7.) In Pro Tools 5.x and higher, go to the Set up window and choose Preferences. In the Preferences box, click on Operation. Then select ‘Classic’ located in the Numeric Keypad Mode Section. Classic Numeric Keypad allows you use the Locate function on MotorMix.
- 8.) Move a MotorMix fader and the corresponding fader should move in the Pro Tools mix window.
- 9.) If you need to operate software other than Pro Tools, you must first exit the Pro Tools mode by pressing the “PLAY” and “ESCAPE” switches on MotorMix. The LCD will say “Pro Tools mode - OFF -”. MotorMix will remain in normal operation mode until returned to Pro Tools mode by pressing the “PLAY” and “ESCAPE” switches a second time.
- 10.) Each time when you use Pro Tools you should have MotorMix powered up first to insure that MotorMix gets a complete update of your most recent session settings.

Troubleshooting

If MotorMix does not respond properly, you can run the built in self-test in MotorMix. Simply connect the MIDI output directly into the MIDI input on MotorMix and apply power. MotorMix will move all 8 faders, blink the LED's and the LCD and test the MIDI in and out. If the test passes, you can look for problems elsewhere.

Contacting Technical Support

For questions related to setting up and using MotorMix with Pro Tools, or if you feel that MotorMix needs to be repaired, contact the Digidesign technical support department.

Digidesign phone: 650 842-6699

Digidesign email: techsupt@digidesign.com

For questions related to setting up and using MotorMix with products other than Pro Tools, please contact the manufacturer of the product you are using.



Switches, Faders, Pots or Selector Usage with Pro Tools

Fader Input

Moving a fader on MotorMix actually moves the Pro Tools on-screen fader. When Pro Tools automation is moving the faders on MotorMix, you can still make level changes by simply touching the MotorMix fader and executing the move you desire. MotorMix disengages the fader motor so you can make level change, but it reengages the motor the moment you stop touching the MotorMix fader. If you wish to keep the fader stationary with the motor disengaged, press and hold the “SHIFT” switch. The motor will stay disengaged as long as the “SHIFT” switch is held down. Holding the “SHIFT” switch down will also allow you to make very small fader movements quite slowly. It keeps the fader motor disengaged during the small fader movements.

Fader Punch Mode

Another option that allows you to disengage the fader motor is to Punch In the individual faders. Punching In a fader will completely disengage the motor on that fader. It saves you from having to hold the “SHIFT” button.

To enter Fader Punch Mode, “double click” the “SHIFT” button. This will cause the LED in the button to blink. Now start playback. Press the “burn” button above the fader you want to Punch In. The yellow LED (funct B) below the “write” LED shines steadily to show that one or more faders are punched in.

To Punch Out an individual fader, press the “burn” button above the fader you want to Punch Out. To Punch Out all faders, press either the “SHIFT” or “write” switch. Pressing any of the transport switches will also Punch Out all faders.

To exit Fader Punch Mode, “double click” the “SHIFT” button once again. The LED will stop blinking. The “SHIFT” switch still performs its normal functions while in fader punch mode.

Rotary Pot Usage

When you open a session, the 7 segment display will read “P” For PAN. If a channel is in stereo, the pot will be the left balance control. Rotate the pots and watch the lower row on the LCD to see the PAN pointers. The dash in the center of the channel LCD indicates PAN enter position. Push the selector down, and the 7 segment display will read “Pr”, PAN right. The rotary pots will now be the right balance control on any stereo channels. Push a second time to return to PAN. Rotate the selector slowly and the 7 segment display will read “SA” for Send A.

Rotate the pots and watch the lower row of the LCD to see send pot settings. If no send is assigned on that channel. The lower LCD row will be blank on that channel. Turn the rotary selector again to select sends B thru E. The rotary pots and selector are the Plug-in controls. See the “Plug-in” section below.

Fader-Send “FLIP”

While the rotary pots are controlling sends, press the rotary selector switch. The channels faders and mutes then “FLIP” to become the send level and mute controls. The top row of the LCD displays the send assignments and the multi switches and LEDs control the send pre/post settings. If the channel Multi LED is lit, then the send is pre fader. Pressing the multi switch will toggle the send from pre to post. The pre and post text will also be displayed briefly on the LCD.

While “FLIPPED”, rotate the selector to work on any of the other sends in a “FLIPPED” fashion. Press the selector to return to rotary pot control. Pan settings and channel plug in bypasses cannot be accessed while the sends are “FLIPPED”.

Select Switches

The switches just below the LCD are the “SELECT” switches. They are used to select one or more channels for grouping or Plug-in control, and provide access to many other Pro Tools features. They are also used to make selections that appear on the LCD. For example, press the “AUTO ENBL” switch and push the select switches to make automation enable selections in Pro Tools.

Multi Controls

The 8 channel switches just below the rotary pots are the “Multi” switches. The 4 switches and 4 green/yellow LED’s just below the selector determine what the “Multi” switches are doing.

Plug-in Bypass

Press the top switch just below the 7 segment display/selector. The 8 channel switches under the rotary pots are now the Plug-in bypass controls for the channels. A green LED on in the channel bypass switch indicates that all the Plug-ins on that channel are bypassed. Push any of the channel bypass switches to toggle Plug-in bypass on that channel.

Send Mute

Press the second switch under the selector. The same 8 channel switches under the rotary pots are now send mute controls for the channels. For example: Rotate the selector to select Send A (“SA” on the 7 segment display). A green LED on in the channel indicates Send A is muted. Push any of the channel bypass switches to mute/unmute a send. Use the selector to select other sends for mute/unmute.

Send Pre/Post Assign

Press the third switch below the selector. The 8 switches are the Send pre/post controls for those channels. Use the rotary selector to select a Send A. When one of the switches is pressed, the pre/post for that channel will be toggled and displayed briefly on the top row of the LCD. Use the selector to choose other sends for pre/post assignment.

Function Switches to Left of Faders

“AUTO ENBL”

Press this switch, and the LCD screen will display the automation enable choices. The LEDs below the LCD show the current enable states. Press any of the switches below the LCD to choose a selection. Press the “AUTO ENBL” switch to exit.

“auto mode”

With “SHIFT” down, press the “auto mode” switch, and the LCD screen will display the current automation mode choices. The LEDs below the LCD show the current mode. Rotate the rotary pots to choose a selection. Press the “ALL” switch and rotate a rotary pot to change all channels to the same state.

If you are playing back Pro Tools automation tracks while in Punch or Latch automation mode, you can Punch In a fader by pressing the “burn” button above that fader. The “burn” button LED will shine steadily as long as the fader motor is disengaged. To Punch Out the fader, press the “burn” button again. The LED will go out and the motor will engage.

“SUSPEND”

Press the “SUSPEND” switch to globally suspend playback and recording of automation. The LED will blink. Press again to globally reactivate playback and recording of automation.

“create”

The “create” switch is used to create groups. First use the “SELECT” switches below the LCD to select the a channel to include in a group. Press and hold the “SHIFT” switch. Press more select switches to add channels. With “SHIFT” still down press the “create” switch and the Pro Tools Group dialog box will appear. Press the “ENTER” switch on MotorMix to complete the process or “ESCAPE” to exit without grouping.

The “group” switch and LED under the “VIEW” section on MotorMix are used to enable/disable groups. If the LED is lit, the groups are enabled. With groups enabled, press and hold the “SHIFT” switch then hold the “group” switch down. The top row of the LCD will show the channel group assignments.

“PLUG-IN” Assignment

- 1.) Use a “SELECT” switch (below the LCD) to pick a channel for plug in assignment.
- 2.) Press the “PLUG IN” switch to enter plug in mode.
- 3.) Press “SHIFT” and “assign” and the LCD display inserts 1-4. You can use the rotary selector switch to select insert 5 for assignment.
- 4.) Rotate a rotary pot (even numbered) on MotorMix to make a plug in selection for the desired insert.
- 5.) Press the “assign” switch again to complete assignments for that insert.
- 6.) Repeat steps 3-5 to add more plug ins to that channel.

“PLUG-IN” Control

Use the “SELECT” switch to select a channel with a Plug-in assigned. Press the “PLUG-IN” switch to enable the LCD, rotary pots and “SELECT” switches to control your Plug-ins. The Plug-in window will open and the rotary pots and selector will become Plug-in controls. The 7 segment displays will say “IN” For insert control or “PA” for parameter control. Push the selector to toggle between insert and parameter control.

Insert control mode

There is an LCD page for Inserts 1-4 and one for Insert 5. Rotate the selector to select either page. The top row of the LCD will display both the insert page and the current channel being controlled. The lower LCD row will display either “no insert” or a shorthand label for a Plug-in. If no label is flashing, that Plug-in is being controlled by MotorMix. Use a “SELECT” switch to pick an insert to control, and the parameter control mode will become active.

Parameter control mode

The LCD will display the Plug-in parameter names and settings. The top LCD row and the “SELECT” switches will control switchable parameters. The lower LCD row and rotary pots control continuously variable parameters. Note that the “SELECT” switch and the correct rotary pot will be just below the parameter values on the LCD. Rotate the selector to move between parameter pages. The upper left of the LCD displays Plug-in page/label.

“compare”

With “SHIFT” down, press the “compare” switch to compare current Plug-in settings with previous settings. This switch only compares if the compare button is lit in the Plug-in window.

“WINDOW”

Press this switch, and the LCD screen will display the Pro Tools window choices, mixer, memory locations, edit, setup, transport, insert editor. The LEDs below the LCD show the open windows. Press any of the switches below the LCD to open or close a window. Press the “WINDOW” switch to close the window and exit.

“tools”

With “SHIFT” pressed down, press the “tools” switch to select an edit tool.

“ALL”

If the “ALL” switch is held down, the current action will be applied across all channels. For example, press “ALL” and then a “Mute” switch, and all channels will be muted or unmuted.

“alternate”

With “SHIFT” pressed down, press the “alternate” switch. Now move a fader and its attenuation settings will appear in the top LCD row for that channel. Move a rotary pot, and the PAN setting or SEND attenuation will appear in the top LCD row on that channel.

Function Switches to Right of Faders

“PLAY”

Press this switch to activate PLAY. The LED will be lit to indicate Pro Tools is playing.

“transport”

With “SHIFT” pressed down, press the “transport” switch. The bottom row of the LCD will show 5 transport controls and the current time code, bars/ beats, feet frames, etc. Press a “SELECT” switch to activate a transport function. The “REW” and “FFWD” controls are momentary in this mode. The “RECORD” switch is the master record enable. Press the “transport” switch again to exit.

“STOP”

Press this switch to stop PLAY, REWIND or FAST FORWARD. The LED will be lit to indicate Pro Tools is stopped.

“locate”

Note: To use the “locate” function on MotorMix, you must be in Classic Numeric Keypad Mode. See instructions for setting Pro Tools to Classic Numeric Keypad Mode on page 1 - section #7.

With “SHIFT” pressed down, press the “locate” switch. The bottom row of the LCD will show 5 locate controls and the current time code, bars/beats, feet frames, etc. Press a “SELECT” switch to activate a transport function. The “REW” and “FFWD” controls are momentary in this mode. Press the “LOCATE” switch to use the autolocate. The Memory-Locate window will open. Press one or two number keys on MotorMix and the “.” key to activate locate. Press “ESCAPE” at any time to exit or enter a locate. Press the “locate” switch again to exit.

“Fast Forward”

Press this switch to activate FAST FORWARD. The LED will be lit to indicate Pro Tools is in fast foreword.

“monitor”

With “SHIFT” pressed down, press the “monitor” switch. The bottom row of the LCD will show 5 punch/monitor controls and the current time code, bars/beats, feet frames, etc. Press “AUD” audition the punch pointer. Press “PRE”, “IN”, “OUT” or “POST” to audition the punch points. Press the “monitor” switch again to exit.

“Rewind”

Press this switch to activate REWIND. The LED will be lit to indicate Pro Tools is rewinding.

“status”

With “SHIFT” pressed down, press the “status” switch. This opens the Pro Tools session status window. Press “SHIFT” and “status” again to close the window.

“NEXT”

Press this switch to move to the next memory-locate position.

“configure”

This switch is reserved for future use.

“LAST”

Press this switch to move to the previous memory-locate position.

“assign”

With “SHIFT” pressed down, press the “assign” switch. The LED will flash. Rotate the selector to select; SEND A thru SEND E, Input “In” or Output “Out”. Each channel rotary pot is used to change the assignment. Press “ESCAPE” or “status” to close the window.

“ENTER”

This switch duplicates the keyboard “ENTER” switch. It is used to end a process like grouping.

“utility”

This switch is reserved for future use.

“ESCAPE”

This switch is used to exit processes before completion. MotorMix with keyboard Most of the computer keyboard switches like “Control”, “Shift”, “Alt”, etc. also perform their usual Pro Tools functions in conjunction with MotorMix. For example; Pressing the “CNTRL” key on the keyboard allows you to move a fader independently or other faders in its group. Think of it as momentarily releasing the fader of a group. Release the “CNTRL” key to put the fader back under group control.

MotorMix with keyboard

Most of the computer keyboard switches like “Control”, “Shift”, “Alt”, etc. also perform their usual Pro Tools functions in conjunction with MotorMix. For example; Pressing the “CNTRL” key on the keyboard allows you to move a fader independently or other faders in its group. Think of it as momentarily releasing the fader of a group. Release the “CNTRL” key to put the fader back under group control.

Creating Custom Consoles!

- You can create a custom console tailored to the way you work.
- Pro Tools supports up to 4 MotorMixes.
- Each MotorMix uses one MIDI IN/OUT port.
- When you have three MotorMixes joined together and you bank switch, the bank is 24 channels wide.
- You can combine them in two basic ways:
 - 1.) In-line configuration
 - 2.) Spread configuration using the CM Labs Wedge™.

Contact your dealer for information and qualified service centers for help.



Setup

Hardware Requirements

Your personal computer with a properly installed and configured MIDI interface with one MIDI input and one MIDI output dedicated to MotorMix. The computer must have the audio hardware that your DAW application requires such as A to D converters (audio inputs) and D to A converters (audio outputs) and Plug-ins .

Connections

Connect the MotorMix MIDI out jack to the MIDI input on your computer MIDI interface. Connect your computer MIDI out jack to the MIDI input jack on MotorMix.

Software Requirements

An audio application from one of the many MotorMix support partners.

Run the audio application and go into the proper menu to enable MIDI input to the application and MIDI output from the application. If the application requires a special controller setup, please follow the directions in the software support manual provided by the software company. We will post software installation procedures on our web site (cmlabs.net) as they become available.

Troubleshooting

If MotorMix does not respond properly, you can run the built in self-test in MotorMix. Simply connect the MIDI output directly into the MIDI input on MotorMix and apply power. MotorMix will move all 8 faders, blink the LED's and the LCD and test the MIDI in and out. If the test passes, you can look for problems elsewhere.

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Description of Controls and Displays

Fader Input

When the faders are not being moved by the computer, you can move them. MotorMix disengages the motor so you can make level changes. The motor will stay disengaged as long as you continue to move the fader. If you wish to keep the fader stationary but keep the motor disengaged, press and hold the “SHIFT” switch. The motors will engage as soon as the “SHIFT” switch is released. If you wish to make very small fader movements quite slowly, press the “SHIFT” switch. This keeps the faders touch released during the small fader movements.

Shift “double click”

Click the shift switch twice quickly and its LED will blink. It is like holding the “SHIFT” switch down to hold faders punched in. Any fader that is punched in will remain punched in until either the “SHIFT” switch or the “write” shift is pressed. Press the “shift” switch twice quickly to exit. The “SHIFT” switch still performs its normal functions while in this mode.

The yellow LED (funct B) below the “write” LED lites to show that one or more faders are punched in. A punched in fader will send moves out and the motor(s) will remain off. Press the “write” or “SHIFT” switch to punch out all faders, and the LED will extinguish. If the transport is playing, pressing “Stop”, “PLAY”, “FFWD” or “REW” will also punch out the faders.

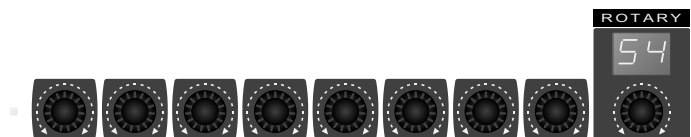
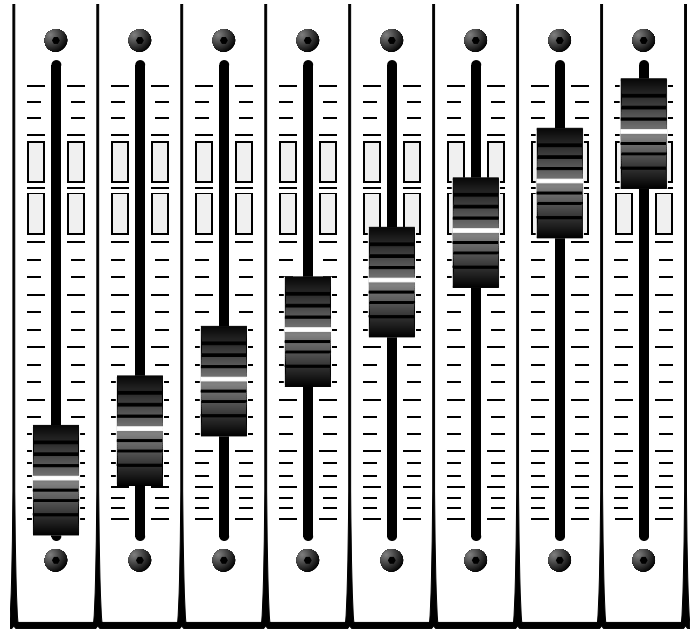
If a fader is being moved by the computer, press a “burn” button to punch the fader in and it will remain punched in regardless of the “SHIFT” switch. The “funct B” LED lites to show that faders are also punched in. Press the channel “burn” switch a second time to punch it out. Press the “write” or “SHIFT” switch to punch out all faders, and the “funct B” LED will extinguish. If the transport is playing, pressing “Stop”, “PLAY”, “FFWD” or “REW” will also punch out the faders.

Rotary Pots

The 8 rotary pots on MotorMix send out relative information only, since the application always knows the current setting. The bottom row of the LCD indicates the current pot settings either graphically or numerically depending on the application. The pots simply add or subtract to the current setting. These pots are intended to control pan, aux send levels, equalizers, and any plug-ins you may have installed.

Rotary Selector

Used in conjunction with the 7 segment display to select what the rotary pots are controlling. Normally, the pots start out controlling pan. Rotating this selector should cause the pots to change their task. Typically, they would go from pan to aux1 to aux2 to aux3, etc. The 7 segment display should give some indication of what the rotary pots are controlling: P=(pan), A1=(aux1), A2=(aux2), etc. The utility of these controls depends on how the host application has implemented them.



Standard Operations

Plug-in Parameters

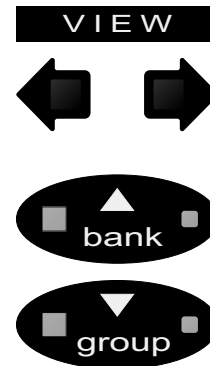
Are controlled by the “ROTARY POTS” section. When controlling plug-ins, all 8 rotary pots become the controls for a selected Plug-in. When a Plug-in has more than 8 parameters, use the selector to select other parameters. When Plug-ins are being controlled, the upper row of the LCD should display the parameter name like “FREQ” or “BOOST” and the lower row of the LCD indicates the current pot settings either graphically or numerically, depending on the application. The use of these controls depends on how the host application has implemented them.

View Controls

The View Control section includes the left and right arrow switches. There are 3 ways to navigate MotorMix to control and view all the channels in your mixer application.

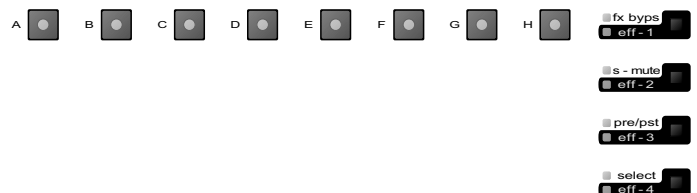
1.) With “BANK” and “GROUP” switches off, you see channels 1-8 displayed. Press the right arrow and you will advance the channels 2-9. Press again and advance to 3-10. This is advancing one channel at a time. The left arrow does the same thing in reverse. The channel labels you have assigned in software will appear in the upper row of the LCD. The LCD has only 5 characters per channel, so use 5 characters or less when you create your channel names.

2.) With the “BANK” switch on, you see channels 1-8. Press the right arrow and you advance immediately to channels 9-17. Press the right arrow again and you will advance to channels 18-26. This is advancing by banks of 8 channels. Pressing the left arrow key does the same thing in reverse.



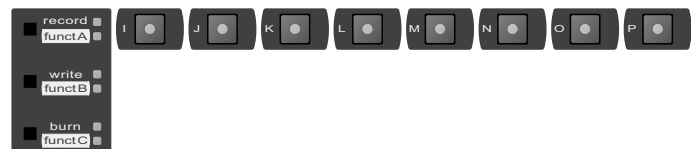
Multi Controls

Just below the 8 rotary pots are 8 Multi switches. Below the selector are 4 switches, 4 green LED's and 4 yellow LED's. For example, if the green LED next to the “equalize” label is lit, the 8 Multi switches are used to turn on and off any equalizers in the mixer channel. When the equalizer is “In”, the green LED in the Multi switch should be lit to indicate the equalizer is active.



Burn Buttons

Just below the 8 Multi switches are 8 “Burn” switches. Below the View controls are 3 switches, 3 red LED's and 3 yellow LED's to select what the “Burn” switches are controlling. For example, if the red LED next to the “rec/rdy” label is lit, the 8 “Burn” switches become the channel record enable switches. When the red LED in the “Burn” switch is blinking or lit, that indicates the channel is record enabled or recording.



Solo Switches

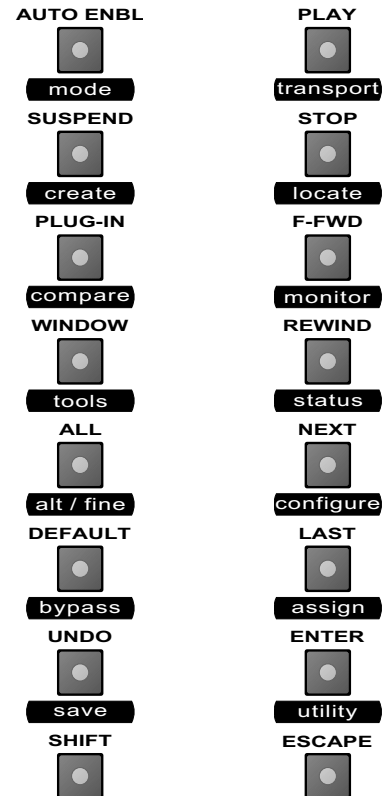
These switches should function just like the Solo switches you are familiar with. Their green indicator LED is controlled by the host application just like all the other LED's on MotorMix. When a Solo is engaged, the green LED is lit.

Mute Switches

These switches should function just like the Mute switches you are familiar with. Their red indicator LED is controlled by the host application. When a Mute is engaged, the red LED is lit.

Left and Right Function Switches

These are the switches to the left and right of the faders on MotorMix. All 16 of these switches have a green LED. The "SHIFT" switch at the lower left is used to shift the panel switches to make secondary selections. For example, press and hold "SHIFT" and then the "equalize" switch. This will make the "eff-1" selection show up below the "equalize" switch. Remember, if the "SHIFT" switch is held, any fader that is punched in "UPDATE" mode will stay punched in until "SHIFT" is released.



Creating Custom Consoles!

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Thank you for purchasing the MotorMix worksurface. We know it will become a solid part of your production studio. It should significantly speed productivity, reduce stress, enhance creativity.

Where did MotorMix come from?

The power of computer based Digital Audio Workstations is proving to be a dream realized for many of us. CM Labs takes the next step by creating a worksurface specifically for digital audio artistry.

The Science of it all.

Hypothesis

Audio engineering is the same physical task, whether in the digital or analog realm. With the sophisticated digital audio software available today, it was time to refine the operation of digital audio workstations (DAW).

Experiment

We spent many hundreds of hours examining all the tasks performed during various phases of audio creation and production processes. We included both novices and seasoned experts in our observations and data gathering. Both traditional studios tape machines with dedicated mixers and bleeding edge PC based DAW's were examined in detail. We recorded the eye, hand, head, and full body movements associated with each task. We ended up with a list which clearly identified what an ideal worksurface should be. This was our guide in developing the MotorMix digital mixer worksurface.

Conclusions

- 1.) People need their worksurfaces to be small enough to minimize eye-hand movements, reduce clutter and workspace size and keep the producer/creator/engineer in the desired monitoring position (a.k.a. sweet spot).
- 2.) The worksurface must be powerful enough to perform hundreds of tasks simply with minimal repetition of movement. This will reduce repetitive stress injuries. The utility and power of the surface must also be intuitive so the novice can quickly operate software applications without a steep learning curve.
- 3.) The worksurface must have adequate display capabilities to reduce or eliminate eye and head motions. The scribble strip must be on the work-surface and clearly identify what is assigned to a specific channel and what the settings are.
- 4.) The primary controls like fader, mute, and solo must not have multiple levels of functionality to them. The worksurface also needs to be light and mobile so it can be easily moved about the workspace.
- 5.) The worksurface must NOT limit the number of available channels even though it only has eight faders. The process to navigate the worksurface over this sea of channels must be simple and flexible.

The Result:

MotorMix Digital Mixer Worksurface

MotorMix is not a simpleminded motorized MIDI fader pack that must continually be reconfigured to do different tasks. MotorMix has bidirectional communication as its most outstanding feature. Couple that with 8 motorized faders, 360 degree rotary pots, and electronic scribble strip (LCD), and it becomes something far greater than the sum of it's parts. MotorMix is a professional worksurface. The faders, rotary pots, selector and panel switches are all designed to input your touch commands into the host computer running your audio applications. The motor faders, LCD display, and LED's on MotorMix all are controlled by the host application. Bidirectional communication guarantees that any user input from the computer mouse, keyboard, or MotorMix will operate smoothly with your computer application, and that the CRT monitor and MotorMix displays will reflect the same message. The result is a seamless integration of worksurface and application.

Typically, a 24 channel analog console with 6 aux busses and 4 band equalizer would have in excess of 250 pots spread out over about 10 square feet. Since the controls on this type of mixer perform only one task on one channel, you had to go to where the action was. Scanning this vast array of controls to change something was like finding a needle in a haystack. The MotorMix digital mixer worksurface, which is one square foot size and has dedicated controls can provide this level of control and ease of operation.

MotorMix does not require any special programming or set up to work with your host applications. CM Labs has furnished a detailed specification document to all our support partners. Our supporters take this document and add support for MotorMix in their software. MotorMix always sends and receives the same messages. You can switch between applications that support MotorMix, without having to make multiple setups. MotorMix has become the standard digital mixer worksurface.

MotorMix Specifications:

- 8 100 millimeter long-life Motion Sensing motorized faders for channel level control and for channel volume indication.
- 8 Quality continuous high resolution rotary pots to control of PAN, Aux Sends, EQ, Time Delay, Dynamics and other Plug-ins. These are not cheapie selectors that you have to rotate 27 times to pan from left to right. They feel and act exactly like the pots you are familiar with except that they are endless (no end stops).
- 2 Seven segment displays to display rotary pot function (scribble strip).
- 1 Detented 24 pulse rotary selector with push to control rotary pot functionality.
- 1 40 x 2 Backlit LCD with contrast control to display Channel Labels, PAN, Aux Send Level, effect parameters, input/output assignments, channel level meter, and soft key control.
- 4 View Control Switches to quickly navigate MotorMix through any number of channels. MotorMix can be set to view individual channels, banks of 8 channels or groups of up to 8 channels. All by 2 simple key strokes.
- 8 "MUTE" Switches with red LED status indicator.
- 8 "SOLO" Switches with green LED status indicator.
- 8 "Burn" Switches (5 alternate functions) with red LED status indicator to control channel audio recording, automation enables, or other commands you can embed into project files.
- 8 Multi Switches (8 functions) with green LED status indicator for channel eq, dynamics, delay and 5 other Multi control choices.
- 8 Channel Select Switches. These switches are used to make channel specific choices like applying a Plug-in.
- 16 System Keys for disk operations, window control, channel label setup, transport, and input/output assignments. CM Labs will provide application specific overlays for the Left and Right function switches.
- Easy communications setup.
- Accessory Serial Port for Edit /Transport Controller.
- MIDI In and Out ports for full bidirectional communications with DAW.
- Small Size (10 1 / 2 inches wide by 12 1 / 2 inches deep).
- Attractive dual slope chassis design for best viewing and ergonomic feel.
- Built in Low Noise Power Supply.

